

Patent Application No. 09/821,168

IN THE DRAWINGS:

New Figure 2 is presented herewith for the Examiner's review and approval.

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REMARKS

This Amendment is in response to the Office Action dated September 15, 2005. In the Office Action, claims 1, 10 and 12 were rejected under 35 USC §112, claims 1-15 were rejected under 35 USC §102, and claims 16-18 were rejected under 35 USC §103. By this Amendment, claims 1, 5, 6, 10, and 12 are amended, and claim 4 is cancelled. Currently pending claims 1-3 and 5-18 are believed allowable, with claims 1, 10 and 12 being independent claims.

AMENDMENT TO DRAWINGS:

Figure 2 is amended herein to include an arrowhead for item 23, as shown in the annotated version of Figure 2 submitted herewith. Support for this amendment can be found at least at page 6, lines 21 to 22 of the Application.

CLAIM REJECTIONS UNDER 35 USC §101:

Claims 1, 10 and 12 were rejected under 35 USC §112, second paragraph, as being indefinite. The Applicant thanks the Examiner for the careful review of the claims and for pointing out this grammatical error in the claims.

By this amendment, claims 1, 10 and 12 are amended to overcome the 35 USC §112 rejections. Specifically, claims 1, 10 and 12 are amended to recite, in part, "moving a modified mobile agent resulting from the successful execution to the next stage to at least two forwarding places." The above-described amendments to claims 1, 10 and 12 are made to correct grammatical errors in the claims, and not for purposes of patentability.

CLAIM REJECTIONS UNDER 35 USC §102:

Claims 1-15 were rejected as anticipated under 35 USC §102 by Rothermel et al., "A Fault-Tolerant Protocol for Providing the Exactly-Once Property of Mobile Agents", 1998 ("Rothermel"). To anticipate a claim under 35 USC §102, a reference must teach every element of the claim. MPEP 2131.

Claim 1

Claim 1 is amended to recite, in part, "generating a decision in each stage, the decision including the primary place that corresponds to the place in which the mobile agent has executed successfully, the set of places of the next stage to which the modified mobile agent is moved, and the resulting

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modified mobile agent." Claim 1 is amended herein to substantially recite all the limitations of claim 4 (now canceled). This discussion will therefore address the Office Action arguments for claim 4.

In rejecting claim 4, the Office Action states, "the Examiner will interpret 'at least one of' as only one of the three limitations maybe satisfied." OA, pg. 7. Thus, in rejecting claim 4, it appears the Examiner interpreted the claim to be anticipated if a reference disclosed the limitations of claim 1 and either:

1. the primary place that corresponds to the place in which the mobile agent has executed successfully;
2. the set of places of the next stage to which the modified mobile agent is moved; or
3. the resulting modified mobile agent.

Claim 1 eliminates the "at least one of" phrase previously present in claim 4. Thus, it is respectfully submitted that claim 1 expressly requires the decision of each stage to include at least all of the above limitations.

The Applicant further submits that Rothermel does not teach or suggest a generated decision with such three items of information discussed above and recited in claim 1. Rothermel merely mentions, "[t]he node with the highest priority becomes the initial worker of a stage." Rothermel, page 3, col. 1, lines 12-13. Moreover, Figure 2 of Rothermel fails to disclose or suggest any details about the information included in the generated decision.

For at least these reasons, claim 1 is believed allowable over the cited art. The Applicant respectfully request reconsideration and allowance of claim 1.

Claims 2, 3, 5-9, 13 and 16

Claim 2, 3, 5-9, 13 and 16 are dependent on (either directly or indirectly) and further limit claim 1. Since claim 1 is believed allowable over the cited documents, claims 2, 3, 5-9, 13 and 16 are also believed allowable for at least the same reasons as claim 1.

Claim 10

Claim 10 is amended to recite, in part, "generating a decision in each stage, the decision including the primary place that corresponds to the place in which the mobile agent has executed successfully, the set of places of the

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next stage to which the modified mobile agent is moved, and the resulting modified mobile agent."

As discussed above for claim 1, the Applicant respectfully submits that Rothermel does not teach or suggest generating decision which includes the primary place that corresponds to the place in which the mobile agent has executed successfully, the set of places of the next stage to which the modified mobile agent is moved, and the resulting modified mobile agent, as recited in claim 10. Rothermel merely mentions, "[t]he node with the highest priority becomes the initial worker of a stage." Rothermel, page 3, col. 1, lines 12-13. Moreover, Figure 2 of Rothermel fails to disclose or suggest any details about the information included in the generated decision.

For at least these reasons, claim 10 is allowable over the cited art. The Applicant respectfully request reconsideration and allowance of claim 10.

Claims 11, 14 and 17

Claim 11, 14 and 17 are dependent on and further limit claim 10. Since claim 10 is believed allowable over the cited documents, claims 11, 14 and 17 are also believed allowable for at least the same reasons as claim 10.

Claim 12

Claim 12 is amended to recite, in part, "means for generating a decision in each stage, the decision including the primary place that corresponds to the place in which the mobile agent has executed successfully, the set of places of the next stage to which the modified mobile agent is moved, and the resulting modified mobile agent."

As discussed above for claim 1, the Applicant respectfully submits that Rothermel does not teach or suggest a decision which includes the primary place that corresponds to the place in which the mobile agent has executed successfully, the set of places of the next stage to which the modified mobile agent is moved, and the resulting modified mobile agent, as recited in claim 12. Rothermel merely mentions, "[t]he node with the highest priority becomes the initial worker of a stage." Rothermel, page 3, col. 1, lines 12-13. Moreover, Figure 2 of Rothermel fails to disclose or suggest any details about the information included in the generated decision.

For at least these reasons, claim 12 is allowable over the cited art. The Applicant respectfully request reconsideration and allowance of claim 12.

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Claims 15 and 18

Claim 15 and 18 are dependent on and further limit claim 12. Since claim 12 is believed allowable over the cited documents, claims 15 and 18 are also believed allowable for at least the same reasons as claim 12.

CLAIM REJECTIONS UNDER 35 USC §103:

Claims 16-18 were rejected under 35 USC §103 as being obvious over Rothermel in view of Greenberg et al. "Mobile Agents and Security", July 1998, IEEE Communications Magazine ("Greenberg"). A *prima facie* case for obviousness can only be made if the combined reference documents teach or suggest all the claim limitations. MPEP 2143. Furthermore, to establish a *prima facie* case of obviousness, there must be some suggestion or motivation to modify the reference or to combine reference teachings. MPEP 2143.

Claims 16-18 recite, in part, "wherein non-primary places are configured to verify the modified mobile agent has successfully arrived at the set of places of the next stage to which the modified mobile agent is moved." In rejecting claims 16-18, the Office Action acknowledges that Rothermel fails to teach that non-primary places are configured to verify the modified mobile agent has successfully arrived at the set of places of the next stage to which the modified mobile agent is moved. Nevertheless, the Examiner alleges that Greenberg teaches such limitations at page 6, lines 25-45. The Applicant has reviewed Greenberg and respectfully disagrees with the Examiner's conclusions.

Greenberg appears to discuss various misuses of mobile agents (pg. 3-6) and techniques for protecting hosts against such misuses (pg. 6-13). Two techniques discussed by Greenberg and relied upon by the Examiner in rejecting claim 16 are Authenticating Credentials and Access-Level Monitoring and Control. Greenberg, pg. 6, ln. 25-45. The first technique (Authenticating Credentials) utilizes digital certificates to verify the identity of the mobile agent's author/sender, its origin, and whether it has been tampered with. The second technique limits the mobile agent's access and use of system resources, information and services. In essence, reference monitor polices the mobile agent's activities and safeguards against unauthorized activities.

The Applicant respectfully submits that nowhere in Greenberg, including the passages cited by the Examiner, is there a teaching or suggestion of that

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non-primary places are configured to verify the modified mobile agent has successfully arrived at the set of places of the next stage to which the modified mobile agent is moved. Although the Office Action alleges that the security manager verifies contents going into the next stage in a mobile agent, the Applicant finds no such teaching or suggestion in Greenberg. Furthermore, the security manager is identified as a Java runtime component and not non-primary places as recited in claims 16-18.

Moreover, obviousness cannot be established by combining prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by an Examiner does make the modification obvious unless the prior art suggested the desirability of the modification. *Id.*

The Examiner argues, "It would have been obvious . . . to combine teachings of Rothermel and Greenberg because having a separate verification entity to verify the content of the message going into the next stage in a mobile agent system as taught by Greenberg would enhance the security and fault tolerant aspect of Rothermel by verifying the content for successful arrival at the destination." The Office Action, however has not explained, and it not evident, why a person of ordinary skill in the art would have found it obvious to reconstruct Greenberg to "enhance the security and fault tolerant aspect of Rothermel by verifying the content for successful arrival at the destination." In this regard, neither Rothermel nor Greenberg express any appreciation of such alleged advantages. In this light, it is apparent that the only suggestion for combining Rothermel and Greenberg in the manner advanced by the Examiner stems from hindsight knowledge impermissibly derived from the Applicant's disclosure.

For at least these reasons, claims 16-18 are allowable over the cited art. The Applicant respectfully request reconsideration and allowance of claims 16-18.

CONCLUSION

In view of the forgoing remarks, it is respectfully submitted that this case is now in condition for allowance and such action is respectfully requested. If any points remain at issue that the Examiner feels could best


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be resolved by a telephone interview, the Examiner is urged to contact the attorney below.

No fee is believed due with this Amendment, however, should a fee be required please charge Deposit Account 50-0510. Should any extensions of time be required, please consider this a petition thereof and charge Deposit Account 50-0510 the required fee.

Respectfully submitted,

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Annotated Sheet

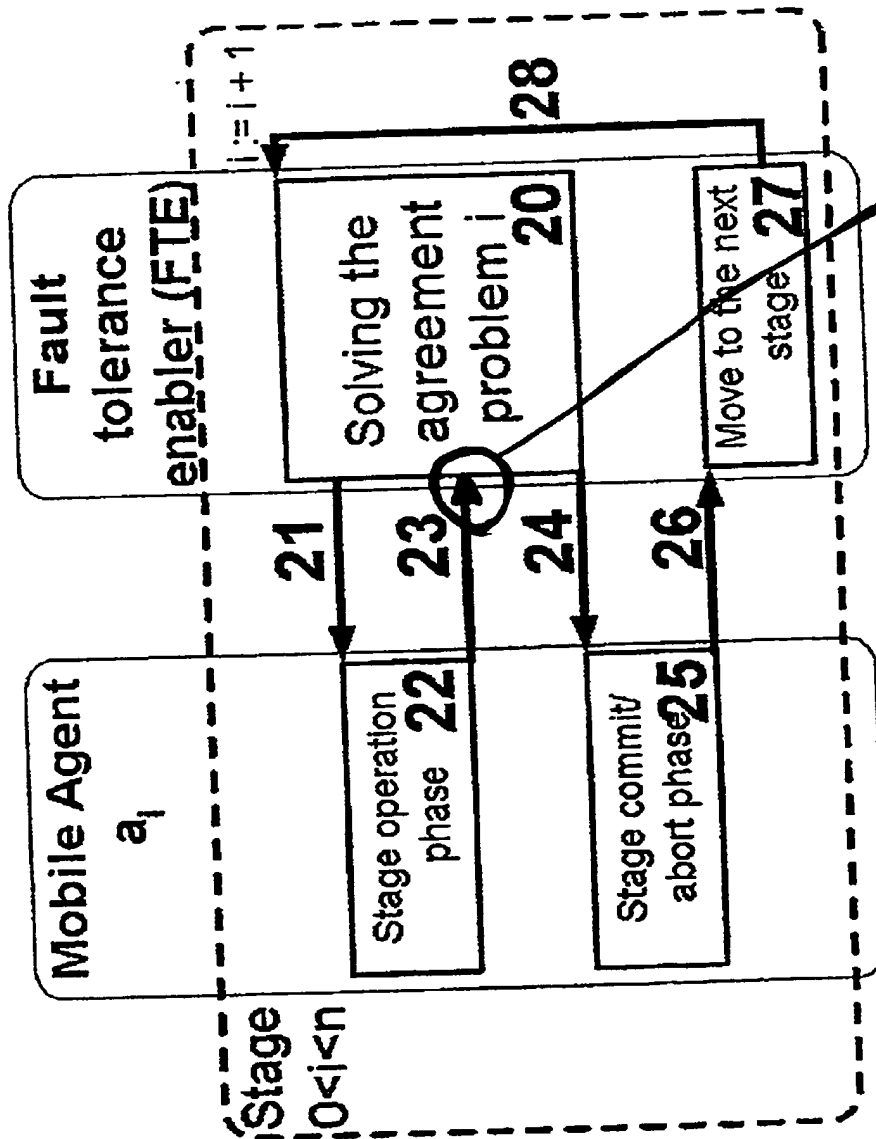


Fig. 2

Addition of arrowhead